703-761-2376

2

AMENDMENTS TO THE CLAIMS:

(Currently amended) A field effect transistor, comprising: Claim 1.

a substrate comprising a source region, a drain region, and a channel region between said source region and said drain region;

an insulating layer disposed over said channel region, said insulating layer comprising an aluminum nitride layer and at least one of an aluminum oxide layer, a silicon dioxide layer, and a silicon nitride layer disposed over said channel region; and

a gate electrode disposed over said insulating layer, wherein said aluminum nitride layer has a thickness that is within a range of about 0.1 nm to about 10 nm.

- (Previously presented) The transistor of claim 1, wherein said insulating layer Claim 2. comprises an aluminum oxide layer disposed upon said channel region, and wherein said aluminum nitride layer is disposed over said aluminum oxide layer.
- (Previously presented) The transistor of claim 1, wherein said insulating layer Claim 3. comprises an aluminum oxide layer disposed over said channel region, and wherein said aluminum nitride layer is disposed under said aluminum oxide layer.
- (Previously presented) The transistor of claim 1, wherein said insulating layer Claim 4. comprises a silicon dioxide layer disposed upon said channel region, and wherein said aluminum nitride layer is disposed over said silicon dioxide layer.

3

- Claim 5. (Previously presented) The transistor of claim 1, wherein said insulating layer comprises a silicon dioxide layer disposed over said channel region, and wherein said aluminum nitride layer is disposed under said silicon dioxide layer.
- Claim 6. (Previously presented) The transistor of claim 1, wherein said insulating layer comprises a silicon nitride layer disposed upon said channel region, and wherein said aluminum nitride layer is disposed over said silicon nitride layer.
- Claim 7. (Previously presented) The transistor of claim 1, wherein said insulating layer comprises a silicon nitride layer disposed over said channel region, and wherein said aluminum nitride layer is disposed under said silicon nitride layer.

Claims 8-13. (Canceled)

Claim 14. (Currently amended) A field effect transistor, comprising:

a substrate comprising a source region, a drain region, and a channel region between said source region and said drain region;

an insulating layer disposed over said channel region, said insulating layer comprising an aluminum oxide layer disposed upon said channel region and an aluminum nitride layer disposed upon said aluminum oxide layer; and

a gate electrode disposed over said insulating layer, wherein said aluminum nitride layer

•

has a thickness that is within a range of about 0.1 nm to about 10 nm.

Claim 15. (Currently amended) A semiconductor device, comprising:

a substrate comprising a source region, a drain region, and a channel region between said source region and said channel region;

4

an insulating layer disposed over said channel region, said insulating layer comprising an aluminum nitride layer and at least one of an aluminum oxide layer, a silicon dioxide layer, and a silicon nitride layer; and

a gate electrode disposed over said insulating layer, wherein said aluminum nitride layer has a thickness that is within a range of about 0.1 nm to about 10 nm.

Claim 16. (Original) The semiconductor device of claim 15, wherein said device comprises a field effect transistor.

Claim 17. (Currently amended) A multi-terminal device, comprising:

a substrate comprising a source region, a drain region, and a channel region between said source region and said channel region;

an insulating layer disposed over said channel region, said insulating layer comprising an aluminum nitride layer and at least one of an aluminum oxide layer, a silicon dioxide layer, and a silicon nitride layer, and

a gate electrode disposed over said insulating layer, wherein said aluminum nitride layer

5

has a thickness that is within a range of about 0.1 nm to about 10 nm.

Claim 18. (Original) The multi-terminal device of claim 17, wherein said device comprises a field effect transistor.

Claims 19-27. (Canceled)

Claim 28. (New) The transistor of claim 1, wherein said insulating layer comprises an aluminum oxide layer having a thickness within a range of about 0.1 nm to about 2.0 nm.

Claim 29. (New) The transistor of claim 14, wherein said aluminum oxide layer has a thickness within a range of about 0.1 nm to about 2.0 nm.

Claim 30. (New) The device of claim 15, wherein said insulating layer comprises an aluminum oxide layer having a thickness within a range of about 0.1 nm to about 2.0 nm.

Claim 31. (New) The device of claim 17, wherein said insulating layer comprises an aluminum oxide layer having a thickness within a range of about 0.1 nm to about 2.0 nm.